Claims

- 1. A process for the production of a dimeric, biologically active Transforming Growth Factor type β (TGF- β)-like protein, comprising treating the denatured monomeric form of said TGF- β -like protein with a detergent-free buffer comprising an organic solvent selected from the group consisting of DMSO, DMSO₂, DMF, and any mixture of two or three members of the group consisting of DMSO, DMSO₂ and DMF.
- 2. The process according to claim 1 in which the buffer additionally contains a reducing substance.
- 3. The process according to claim 1 or 2\in which the organic solvent is selected from the group consisting of DMSO, DMF and any\mixture thereof.
- 4. The process according to claim 1 or 2 in which organic solvent is used in a concentration of about 10 to about 50%.
- 5. The process according to claim 1 or 2 in which organic solvent is used in a concentration of about 20 to about 50 %
- 6. The process according to claim 1 or 2 in which organic solvent is used in a concentration of about 30 to about 50%
- 7. The process according to claim 1 or 2 in which organic solvent is used in a concentration of about 30 % to about 40 %.
- 8. The process according to claim 1 or 2 in which organic solvent is used in a concentration of about 40 %.
- 9. The process according to claim 1 or 2 in which the TGF- β -like protein is selected from the group consisting of TGF- β 1, TGF- β 2, TGF- β 3, heterodimeric TGF- β 8, fragments and mutants of a TGF- β including hybrid molecules in which parts of different TGF- β 8 are exchanged, BMPs, inhibins and activins.

- 10. The process according to claim 1 or 2 in which the TGF- β -like protein is selected from the group consisting of TGF- β 2, TGF- β 3, hybrid TGF- β 1-2, hybrid TGF- β 1-3, hybrid TGF- β 3-2, and BMP-2.
- 11. The process according to claim 10 in which the TGF-β-like protein is TGF-β3.
- 12. The process according to any of claims 1 or 2 in which the buffer has a pH of about 6 to about 10.
- 13. The process according to any of claims 1 or 2 in which the buffer has a temperature of about 0°C to about 40°C.
- 14. The process according to claim 2 in which the reducing substance is a reduced sulfhydryl compound.
- 15. The process according to claim $\frac{1}{2}$ in which the reduced sulfhydryl compound is selected from the group consisting of glutathione in its reduced form, β -mercaptoethanol in its reduced form, mercaptomethanol in its reduced form, cysteine, cysteamine, and dithiothreitol in its reduced form.
- 16. The process according to claim 2 in which the reduced sulfhydryl compound is used in a concentration of about1 to100mM.
- 17. The process according to claim 2 in which the reduced sulfhydryl compound is used in a concentration of about1 to10mM
- 18. The process according to claim 2 in which the reduced sulfhydryl compound is used in a concentration of about 2.5 mM.

add a'